



**CONESTOGA-ROVERS  
& ASSOCIATES**

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February 11, 2010

Reference No. 054046

Mr. David Garrett  
Environmental Scientist  
U.S. Environmental Protection Agency, Region 7  
Air and Waste Management Division  
RCRA Corrective Action & Permits Branch  
901 N. Fifth Street  
Kansas City, Kansas 66101

**VIA E-MAIL &  
FEDEX COURIER**

Dear Mr. Garrett:

Re: U.S. EPA's Comments  
Interceptor Well System Corrective Measure (ICM) Effectiveness  
Evaluation dated December 14, 2009  
Occidental Chemical Corporation  
6200 S. Ridge Road, Wichita, Kansas  
RCRA ID# KSD007482029

Conestoga-Rovers & Associates (CRA), on behalf of Occidental Chemical Corporation (OCC), has prepared responses to the United States Environmental Protection Agency (U.S. EPA) comments detailed in your letter dated January 22, 2010. For ease of your review, U.S. EPA's comments are reiterated below in italic print, followed by CRA's response.

### **Specific Comments**

#### **1. Page 6, Section 2.1.2, Historical Waste Disposal**

*The last paragraph on this page states that the brine and solar ponds received calcium carbonate, magnesium hydroxide, brine water, hydrochloric acid, sulfuric acid and potentially other non-organic liquids. This paragraph must be amended to include hex and benzene hexachloride (BHC) waste disposal in the brine pond area since these wastes were detected in soil samples taken from the brine pond in November 2009 during the Alpha Cake Landfill, Hex Waste Pits & Brine Ponds Phase 1 Investigation.*

#### **Response**

No documentary or anecdotal information exists to suggest that hex wastes or BHC-production wastes were ever disposed in the brine pond. Moreover, the historical brine sludge operations were separate from the alpha cake and hex waste processes; however, the location of these disposal areas is generally in the same vicinity. To that end, it is possible that some runoff or particulate dust from the alpha cake and hex waste disposal areas migrated to the brine ponds or that some of the wastes were commingled during

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closure. The relatively low concentrations of BHC and hex waste-related constituents detected in the brine pond area during the November 2009 sampling do not suggest that gross disposal of related waste occurred in this area. Therefore no changes to the report are proposed. Nevertheless, additional investigations to delineate the Hex Waste Pits, Alpha Cake Landfill and Brine Ponds are ongoing and if further information indicates that gross disposal of organic waste occurred in the brine pond, the final investigation report for the Chemical Waste Landfill AOC will reflect that finding.

2. Page 7, Section 2.1.2, Historical Waste Disposal

*The last sentence in the middle paragraph states that process waste, spills or releases in the Truck and Rail Loading Area are directed to sumps which are part of the chemical sewer system. Please revise this sentence to state which sump numbers receive wastes from these areas. In addition, please clarify where the wastes from these respective sumps are transferred for permanent disposal. It must be clarified whether these wastes are transferred from the sumps to OCC's deep wells for permanent disposal or via some other mode of permanent disposal.*

Response

Attached please find replacement pages 7 and 8 to the report providing the requested additional details.

3. Page 21, Section 3.5, 2001-Present Shaw Environmental, Inc.

*The last paragraph states that a total of 18 borings were advanced southward to 71<sup>st</sup> Street and that 13 samples analyzed using the mobile gas chromatograph (GC) exceeded the Maximum Contaminant Level (MCL) for carbon tetrachloride. However, the results of the confirmation samples sent to the laboratory were all non-detect.*

*This paragraph is inconsistent with results from EPA's review of site data. EPA identified 21 separate GC samples collected at varying depths in 2007 and 2008 that exceeded the MCL of 5 µg/L for carbon tetrachloride. These exceedances ranged from 5.5 µg/L to 236 µg/L. The fixed laboratory confirmation samples also contained carbon tetrachloride MCL exceedances ranging from non-detect to 626 µg/L. In addition, some of the fixed laboratory confirmation samples were not even analyzed for carbon tetrachloride.*

*Therefore, OCC must revise this paragraph to accurately state that there were carbon tetrachloride exceedances in MCL in Section 34, in both GC samples and fixed*





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*laboratory samples.*

Response

Attached please find replacement pages 21 and 22 to the report providing the requested additional details.

4. Page 33, Section 5.1.2, Historical Contaminants of Concern (COC)

*The last paragraph recommends the elimination of D-BHC from the OCC list and from the list of sample analytes in future groundwater sampling events because there are no regulatory standards for D-BHC, the detection of this contaminant was very limited, and it was detected only once in February 2009.*

*EPA disagrees with this recommendation and expects this constituent to remain a COC in the current semi-annual groundwater sampling program for the foreseeable future. This contaminant was discovered during the facility's first Appendix 9 sampling event in 2008. According to EPA's last update of eDat data (August 2008), there were 16 detections of D-BHC in OCC wells. EPA agrees with OCC in that there are no current screening levels for D-BHC. However, there existing screening levels for OCC's other BHC constituent (A-BHC-0.011 micrograms per liter (µg/L), B-BHC-0.037 µg/L, and G-BHC-0.061 µg/L), all of which are below 1 µg/L. Nearly all of the 2008 D-BHC detections exceeded screening levels for the other BHC constituents. Therefore, this contaminant needs to be retained in the sampling program.*

Response

Attached please find replacement pages 31 and 32 to the report noting that D-BHC will remain on the COC list.

5. Page 35, Section 5.4, Chemicals of Focus

*Since the chemicals 1,1,1-Trichloroethane, 1,2-Dichloropropane, Methyl Chloride and Vinyl Chloride were omitted as Chemicals of Focus for the evaluation of the interceptor well network only, it is EPA's understanding and expectation that these chemicals continue to be sampled as part of the facility's semi-annual groundwater sampling event. OCC must also continue to sample for these constituents in any environmental media as well.*



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Response

Acknowledged.

6. Page 76, Section 11.0, Recommendation

*This paragraph states that additional information is necessary to enhance the groundwater interceptor system evaluation. An assessment of the conditions of the interceptor wells should be completed in the near future as part of the facility's operation and maintenance program. EPA agrees. Change pages must be submitted, stating when this additional assessment will occur, what exactly the assessment will consist of, and how will this information be presented to EPA.*

Response

Agreed; however, the details of the interceptor system evaluation will be provided in the same report that provides OCC's recommendations for ongoing semi-annual groundwater monitoring to be submitted to U.S.EPA during the second quarter of 2010.

Should you have any questions on the above, please do not hesitate to contact us.

Yours truly,

CONESTOGA-ROVERS & ASSOCIATES

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